

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-014694**Date Inspected:** 07-Jun-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1500**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site

CWI Name:	Bernard Docena, Bnifacio Daquina, GWS Present			CWI Present:	Yes	No	
Inspected CWI report:	Yes	No	N/A	Rod Oven in Use:	Yes	No	N/A
Electrode to specification:	Yes	No	N/A	Weld Procedures Followed:	Yes	No	N/A
Qualified Welders:	Yes	No	N/A	Verified Joint Fit-up:	Yes	No	N/A
Approved Drawings:	Yes	No	N/A	Approved WPS:	Yes	No	N/A
				Delayed / Cancelled:	Yes	No	N/A
Bridge No:	34-0006			Component:	SAS OBG		

Summary of Items Observed:

The Quality Assurance (QA) Inspector, Rick Bettencourt was on site at the job site between the times noted above. The QA Inspector was on site to randomly observe the in process welding and inspection of the weld joints identified 4W/5W-D, 3W/4W-E and the following observations were made:

3W/4W-E

Upon the arrival of the QA Inspector at the above identified weld joint it was observed and noted, the above identified weld joint appeared to be approximately 95% completed. The QA Inspector observed the approximately 670mm at the bottom of the weld joint which could not be reached by with the semi-automated bug-o track system.

The QA Inspector randomly observed the American Bridge/Fluor (ABF) welder Song Tao Hunag setting up to perform shielded metal arc welding (SMAW) of the 380mm of weld joint identified above. The QA Inspector randomly observed the Smith Emery (SE) Quality Control (QC) Inspector Bernard Docena set the SMAW parameters prior to the ABF welder performing welding of the 380mm of the weld joint. The QA Inspector noted the ABF welder was utilizing 1/8" E7018 low hydrogen electrodes with 127 Amps. The QA Inspector noted the SMAW parameters appeared to be in general compliance with the contract documents. The QA Inspector randomly observed the ABF welder perform the SMAW root/fill pass for the remainder of the QA Inspectors shift.

4W/5W-D

The QA Inspector randomly observed the ABF welder identified as Xiao Jian Wan setting up to perform the flux cored arc welding (FCAW) seal weld or full length tack welding of the above identified weld joint. The QA Inspector noted the induction heating blankets had been previously installed to achieve the minimum required

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preheat of 150°F. The QA Inspector noted the SE QC Inspector Bernard Docena was on site to monitor and record the in process welding. The QA Inspector performed visual testing of the fit up of the above identified weld joint prior to the FCAW tack welding. The QA Inspector noted the weld joint had been previously accepted by the QC Inspector Bernard Docena. After the random dimensional verification of the weld joint, it was noted the weld joint appeared to be in general compliance with the contract requirements. The QA Inspector randomly observed the ABF welder continue performing the FCAW tack weld or seal weld of the above identified groove weld tying or joining the two members by welding. The QA Inspector randomly observed the QC Inspector identified above, monitor and record the in process FCAW parameters. The QA Inspector randomly verified the parameters noted they were 254 Amps, 23 Volts and a travel speed of 330mm/min. The QA Inspector noted the FCAW parameters appeared to be consistent with the given parameters of ABF-WPS D1.5-3200-2. The QA Inspector noted the ABF welder was performing the FCAW for the remainder of the QA Inspectors shift.

The QA Inspector spent the remainder of the shift observing all locations where production welding had been taking place. The QA Inspector observed both the East and West bound OBG transverse field splices. The QA Inspector observed all completed production welding and completed and or accepted NDT performed by SE QC. The QA Inspector was provided a log generated by the contractor. The QA Inspector noted the log did not appear to be complete; The QA Inspector spent the remainder of the shift updating and tracking the in process or completed production welding.

Summary of Conversations:

as noted above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mohammad Fatemi (916)-813-3677, who represents the Office of Structural Materials for your project.

Inspected By:	Bettencourt,Rick	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer
